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(54) **A coding system for video signals.**

(57) A video processing system is disclosed that separates and separately encodes and decodes the low (LFREQ) and high (HFREQ) spatial frequency coefficients of images for transmission or storage. Each block of an image is transformed (in 106) into the frequency domain. High frequency coefficients of the resulting transform matrix are separated (in 108) from the low frequency coefficients. The low frequency coefficients are motion prediction compensated (by 124) to derive motion vectors and a prediction error signal. The motion vectors, prediction error signal and high frequency coefficients are channel encoded (in 116) for storage or transmission. In a receiver, the motion vectors and prediction error signal are used to reconstruct a low frequency motion-compensated version of the image. The high frequency coefficients are inverse transformed into the pel domain and are combined with the reconstructed low frequency version of the image to reconstruct a version of the original image.

EP 0 454 927 A3

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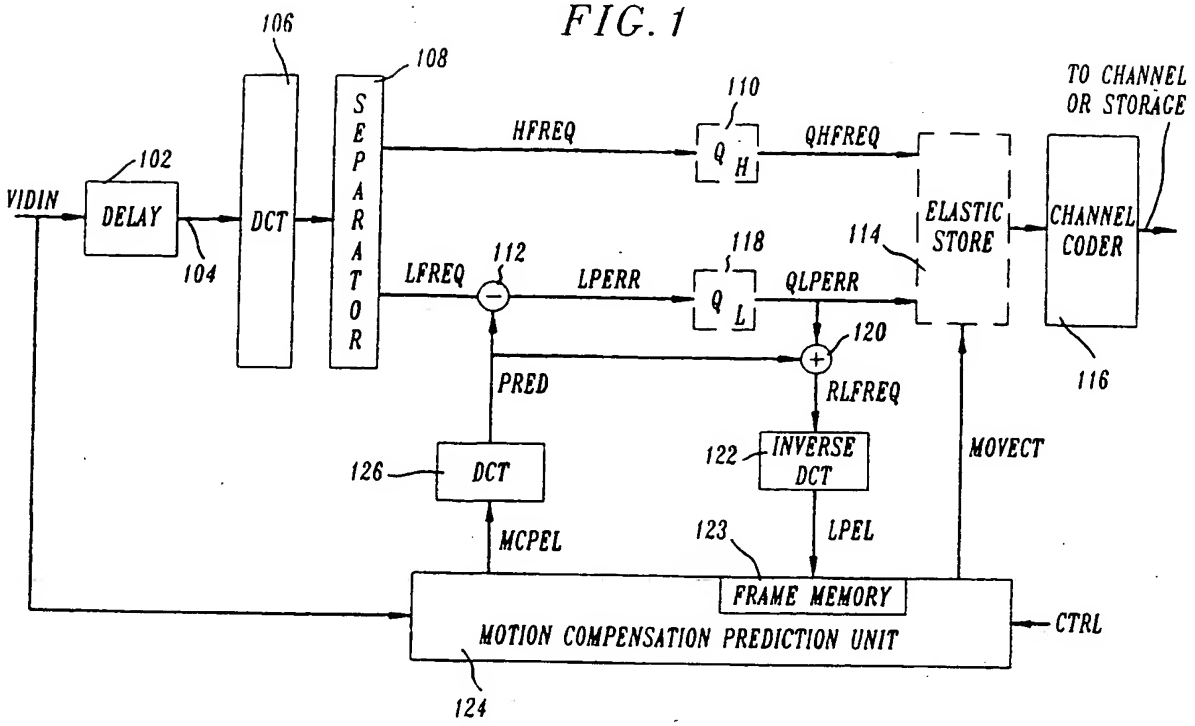
FIG. 1



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EP 90 31 3839

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	IEEE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS 1990 vol. 3/4, 1 May 1990, NEW ORLEANS, US pages 1895 - 1898 Y.YASHIMA ET AL. 'HDTV/Standard-TV compatible coding based on DCT' * the whole document *	1-10	H04N7/13
X	IEEE GLOBAL TELCOMMUNICATIONS CONFERENCE & EXHIBITION 1988 vol. 2/3, 28 November 1988, HOLLYWOOD, US pages 743 - 749 K.H.T.TZOU ET AL. 'Compatible HDTV Coding for Broadband ISDN' * the whole document *	1-10	
A	SPIE IMAGE PROCESSING ALGORITHMS AND TECHNIQUES vol. 1244, 12 February 1990, SANTA CLARA, US; pages 343 - 354 L.VANDERDORPE ET AL. 'Hierarchical encoding of HDTV by transform coefficients block splitting' * abstract; figure 2 * * section 1: "Introduction" on page 343 *	1-10	TECHNICAL FIELDS SEARCHED (Int. Cl.5) H04N
A	IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS 1990 vol. 3/4, 15 April 1990, ATLANTA, US; pages 1025 - 1029 K.HOSODA ET AL. 'High Quality variable rate video coding based on stabilization of lower frequency component' * abstract; figure 1 * * Section 1: "Introduction" on page 1025 *	1-10	
A	US-A-4 245 248 (NETRAVALI ET AL.)		

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	13 OCTOBER 1992	GIANNOTTI P.

CATEGORY OF CITED DOCUMENTS

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A	NEC RESEARCH AND DEVELOPMENT no. 95, October 1989, TOKYO JP pages 69 - 77 T.ISHIDA ET AL. 'Development of a 64Kbps Video CODEC: NETEC VisualLink 1000' -----		

TECHNICAL FIELDS SEARCHED (Int. Cl.5)

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